# DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION ACTIVITY REPORT: On-site Inspection

P054156822		
FACILITY: LAKEWOOD WASTEWATER AUTHORITY		SRN / ID: P0541
LOCATION: 13751 HARWOOD ROAD, LAKE ODESSA		DISTRICT: Grand Rapids
CITY: LAKE ODESSA		COUNTY: IONIA
CONTACT: Doug Suntken, Plant Superintendent		ACTIVITY DATE: 03/17/2021
STAFF: Eric Grinstern	<b>COMPLIANCE STATUS:</b> Compliance	SOURCE CLASS: MINOR
SUBJECT: Compliance Inspection		
RESOLVED COMPLAINTS:		

Scheduled inspection of Lakewood Wastewater Authority to determine compliance with Permit to Install (PTI) No. 130-14, as well as applicable state and federal air quality rules and regulations.

## FACILITY DESCRIPTION

Lakewood Wastewater Authority processes wastewater from the Villages of Lake Odessa and Woodland as well as the Townships of Odessa and Woodland.

# **REGULATORY ANALYSIS**

The facility holds one permit (PTI No. 130-14) for a 1,500 kW diesel-fueled emergency generator, which is the only regulated air emission source at the facility.

# **COMPLIANCE EVALUATION**

Due to COVID 1, facility records were requested on January 19, 2021, and reviewed. An on-site inspection was conducted on March 17, 2021. The on-site inspection was announced, approximately one hour prior to the inspection, and coordinated with the facility to address any issues associated with COVID. Representing the facility was Doug Suntken, Plant Superintendent.

At the facility staff and Mr. Sunken wore masks and maintained a distance of at least 6 feet apart.

Note: The engine was not operating during the onsite inspection.

## EUENGINE1

1,500 KW diesel-fueled emergency generator

The generator was installed as an EPA Certified unit under NSPS Subpart IIII.

## Emission Limits

The generator has emissions limits for NMHC+NOx, CO, and PM. Additionally, the unit has an opacity limit of 15 percent during lugging mode and 20 percent during all other times.

Compliance with the emissions limits is based on the engine being EPA certified and the facility properly maintaining the engine. The facility supplied a copy of a recent full service maintenance conducted by Cummins.

The facility documents visible emissions on monthly logs. The logs document that there is visible emissions upon startup. The facility further clarified via email and during the on-site inspection that the visible emissions only last a brief moment on startup.

## Material Limits/Records

The engine is restricted to burn only diesel fuel, along with restrictions on the sulfur content (15ppm or 0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent.

Compliance is demonstrated through the facility maintaining fuel supplier certification records. The facility provided a recent purchase receipt from Crystal Flash. Included with the receipt is a statement from Crystal Flash that the diesel fuel satisfies the requirements set forth in PTI No. 130-14.

The recently received fuel was a Premium 50 DSL Off Road Dyed Diesel. Contact with Crystal Flash determined that the fuel is an ultra low sulfur diesel fuel with a Premium 50 Diesel additive that increases the Cetane number. Staff has previously determined that the ultra low sulfur diesel fuel has a maximum sulfur content of 15ppm. The Cetane number is 50 with the additive. The Cetane index number appears that it would be slightly less than the Cetane number, but still above 40. Mr. Suntken stated that he has discussed required fuel spec documentation with Crystal Flash, and will only allow delivery with exact documentation of conforming specs.

The facility also supplied a copy of a recent "Stored Fuel Inspection and Maintenance Report" conducted on the stored diesel.

### Process/Operational Restrictions

Restricts operation of the engine to no more than 500 hours per year on a 12 month rolling time period basis.

The facility supplied records showing that the engine operated a total of 24.1 hours for the 12 month time period ending in December 2020.

The permit restricts operation of the engine to no more than 100 hours per calendar year for maintenance checks and readiness testing.

Facility records showed that all 24.1 hours of operation in 2020 was for non-emergency, maintenance and readiness testing.

The facility is required to operate the certified engine in accordance with manufacture's instruction.

There is no evidence that the engine has been operated contrary to the manufacture's instructions.

## **Design/Equipment Parameters**

Requires a non-resettable hours meter to track the operating hours. The non-resettable hours meter was observed during the on-site inspection.

## Monitoring/Records

The facility provided permit required records as previously detailed. Additionally, the facility is required to maintain records of the diesel fuel usage rate on a monthly and 12-month rolling time period basis. The facility provided monthly and 12-month rolling fuel usage records. Total fuel usage for 2020 was 230 gallons.

## <u>Testing</u>

Testing is required to demonstrate compliance with the emission limits in 40 CFR 4205, unless the engine is certified and maintained as required.

The engine was purchased as certified and the facility provided maintenance records, therefore testing is not required at this time.

### Reporting

The engine is not operated or contractually obligated to operated for the purposes specified in 40 CFR 60.4211(f), therefore reporting for this purpose is not required.

### CONCLUSION

Based on the information and observations, the facility appears to be in compliance with applicable air quality rules and regulations at this time.

NAME <u>*Tic Grinstern*</u> DATE <u>3/23/2021</u> SUPERVISOR <u>HH</u>